REMARKS

Claims 1-26 and 35-38 are pending in the application. Applicants have amended Claims 5, 7, 14, 16, 23 and 25. The amendments add no new matter and are fully supported by the specification as originally filed.

Applicants respond below to the Notice to Comply and to the Restriction Requirement.

Restriction Requirement

In response to the Restriction Requirement mailed November 15, 2007, Applicants provisionally elect to prosecute, with traverse, the claims identified in Group II, *i.e.*, Claims 1-4, 7 and 8.

The Examiner states that the claims are drawn to four different inventions, Groups I-IV. Specifically, the Examiner argues that Claims 1-6 and 8 are drawn to an optical sensor for detecting human α-thrombin (Group I); Claims 1-4, 7 and 8 are dawn to an optical sensor for detecting D-adenosine (Group II); Claims 9-15, 18-24, and 35-37 are drawn to a method of detecting human α-thrombin (Group III); and Claims 9-13, 16-22, 25, 26, 35, 36, and 38 are drawn to a method for detecting D-adenosine (Group IV). According to the Examiner, the inventions of Groups I-IV do not relate to a single inventive concept. Specifically, the Examiner argues that "the technical feature linking [the] groups appears to be aptamers, or nucleic acid ligands." *Office Action* at 4. According to the Examiner, nucleic acid ligands, or aptamers, were described in Tuerk et al., (1990), *Science*, 249:505-510, and therefore the technical feature linking the groups "does not define a contribution over the prior art." *Id.* The Examiner further asserts that the claims are drawn to products, methods of making, and methods of use, and are therefore subject to restriction pursuant to 37 C.F.R. § 1.475. Applicants respectfully disagree.

Applicants' claimed invention is based in part on the discovery of an optical sensor that can be used to detect a target. The optical sensor comprises an aptamer *and* "a water soluble cationic polythiophene derivative." The recited optical sensors can be used to detect targets, including but not limited to α-thrombin and D-adenosine.

In defining the "technical feature" of Applicants' claims, the Examiner has improperly disregarded limitations of the independent claims, *e.g.*, Claims 1, 9, and 18. Each of the claims recites an optical sensor for detecting a target that comprises an aptamer *and* "a water soluble cationic polythiophene derivative." In other words, contrary to the Examiner's assertions,

Applicants' claimed optical sensor is not just "an aptamer," which the Examiner argues was previously described in Tuerk et al. Tuerk et al. does not teach or fairly suggest an optical sensor that comprises both an aptamer and a polythiophene derivative. Accordingly, Applicants' optical sensor provides an inventive step over the cited art.

37 C.F.R. § 1.475(b) provides that "an international or a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn to only one of the following combinations of categories. . . (2) a product and a process of use of said product." Applicants maintain that the claimed invention relates to an optical sensor (which includes an aptamer and a polythiophene derivative) and a process of use of the optical sensor. Accordingly, the claims should be examined together.

In view of the foregoing arguments, Applicants respectfully request reconsideration and withdrawal of the restriction.

Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/ar Amino Acid Sequence Disclosures

Applicants amend the application as follows: (1) Applicants amend the specification and claims to provide SEQ ID NOs. to sequences contained in the application and (2) Applicants amend the specification to include a Sequence Listing which is being filed herewith. **Accordingly, no new matter has been added to the instant application.**

Applicants provide herewith both a paper copy and computer readable form (CRF) copy of the Sequence Listing. Applicants respectfully submit that the Sequence Listing is fully supported by the specification as originally filed on December 1, 2005. The information recorded in computer readable form is identical to the Sequence Listing submitted herewith on paper. **Accordingly, entry of the Sequence Listing adds no new matter to the instant application.**

CONCLUSION

The undersigned has made a good faith effort to respond to the Restriction Requirement and Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/ar Amino Acid Sequence Disclosures. Nevertheless, if any undeveloped issues remain or if any issues require clarification, the Examiner is invited to call the undersigned attorney to resolve such issues promptly.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 1/15/08

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